## Control of gorse (Ulex Europaeus L) with triclopyr both alone and in combination with picloram.

J. R. Phimister and A. R. Murphy

Dow Chemical (Australia) Limited, 390 St. Kilda Road, Melbourne.

Since the introduction of 2,4,5-T into Australia in 1953/54, gorse has been controlled by summer applications of 1:200 2,4,5-T (4 g a.e./L), or the less effective winter application of 1:200 plus diquat 1:800 to improve the cosmetic effect. Amitrole at 1:50 has also been used as in summer only. The introduction of Tordon\*520 (50 g a.e./L picloram plus 200 g a.e./L 2,4,5-T) in 1970 provided a valuable breakthrough in gorse control by extending the period of application to cover winter treatment as well as providing a higher level of control. Government legislation and trade union pressure has weakened user demand for 2,4,5-T based products. This paper reports an evaluation of some alternative herbicides.

## Methods

Ten sites covering Tasmania (5) Victoria(3) and New South Wales(2) were selected. Conventional high volume sprays technique with applications to run off in 2,000 - 4,000 L/ha water volume were made with equipment ranging from knapsack sprayers to motorized units operating at 1000-2000 kPa pressure.

## **Results and Discussion**

Garlon\*480 100-200 g a.e./100L provided moderate to good control of gorse (18.1-10.0% regrowth) and was superior to the commercial standards 2,4,5-T at 100-136 g a.e./100L (40.4% regrowth) and amitrole at 500 g a.e./100L (20% regrowth). Picloram/triclopyr combinations as Grazon\* at 25/75, 33/99 and 50/150 g a.e./100L gave excellent control of gorse (8.7 - 3.0% regrowth) and were clearly superior to triclopyr alone. Applications may be made throughout the year without a reduction in efficacy, although complete brownout may not be observed until well into the summer following a winter treatment. Garlon\*480 is an alternative where lower soil residual effects on legumes or other susceptible plants are required. The selectivity to grasses of triclopyr and triclopyr/picloram combinations is advantageous compared to amitrole.

TREATMENT ON MEAN PER	RCENT REGROWTH OF RATE	NO. OF	MEAN X
To a Committee of the C	(g a.e./100L)	SITES	REGROWTH
Triclopyr (Garlon*480)	100	8	18.1
	200	5	10.0
Picloram/triclopyr .	25/75	6	8.7
(Grazon* Foliar Spray	33/99	8	3.4
Herbicide)	50/150	3	3.0
Picloram/2,4,5-T (Tordon*520)	25/100	7	10.0
Amitrole (Farmco**Amitrole-T)	500	2	20.0
2,4,5-T (Butoxone 80 TLV400**)	100-136	5	40.4
<pre>\$ Assessments were made 8, 10, # Visually on 0-10 scale where</pre>			

- 1. A. M. Feez, A. R. Murphy Brushweed control in bushland with triclopyr. In press.
- 2. Ivon Watkins-Dow Technical Bulletin. Control of Gorse No.220. Recommendations for the control of noxious weeds in Victoria. Department of Crown Lands and Survey Bulletin No. 3F, 1983.
- 3. M.J. Hartley, A.1. Popay 35th N.Z. Weed and Pest Control Conf. 138-140, 149-151, 1982.
- \* \*\* + Trademarks of The Dow Chemical Company, C.I.K. Australia Pty. Ltd., ICI Australia Operations Pty. Ltd. respectively.